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NOTICE OF ALLOWANCE AND FEE(S) DUE

20311 7590 10/03/2008

LUCAS & MERCANTI, LLP
475 PARK AVENUE SOUTH
15TH FLOOR
NEW YORK, NY 10016

EXAMINER	
HEARD, THOMAS SWEENEY	
ART UNIT	PAPER NUMBER
1654	

DATE MAILED: 10/03/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,740	11/11/2003	Richard B. Greenwald	213.1207	4315

TITLE OF INVENTION: PRODRUGS OF VANCOMYCIN WITH HYDROLYSIS RESISTANT POLYMER LINKAGES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1510	$300	$0	$1810	01/05/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

20311 7590 10/03/2008

LUCAS & MERCANTI, LLP
475 PARK AVENUE SOUTH
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NEW YORK, NY 10016

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,740	11/11/2003	Richard B. Greenwald	213.1207	4315

TITLE OF INVENTION: PRODRUGS OF VANCOMYCIN WITH HYDROLYSIS RESISTANT POLYMER LINKAGES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1510	$300	$0	$1810	01/05/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
HEARD, THOMAS SWEENEY	1654	530-322000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

❑ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

❑ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1_____

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2_____ 3_____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ❑ Individual ❑ Corporation or other private group entity ❑ Government

4a. The following fee(s) are submitted:

❑ Issue Fee

❑ Publication Fee (No small entity discount permitted)

❑ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**

❑ A check is enclosed.

❑ Payment by credit card. Form PTO-2038 is attached.

❑ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

❑ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

❑ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

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EXAMINER	
HEARD, THOMAS SWEENEY	
ART UNIT	PAPER NUMBER
1654	

DATE MAILED: 10/03/2008

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 492 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 492 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

Notice of Allowability	Application No.	Applicant(s)	
	10/705,740	GREENWALD ET AL.	
	Examiner	Art Unit	
	THOMAS S. HEARD	1654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *examiner's amendment, 9/25/2008*.

2. ☒ The allowed claim(s) is/are *1,4-6,8,10-14 and 19-36*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

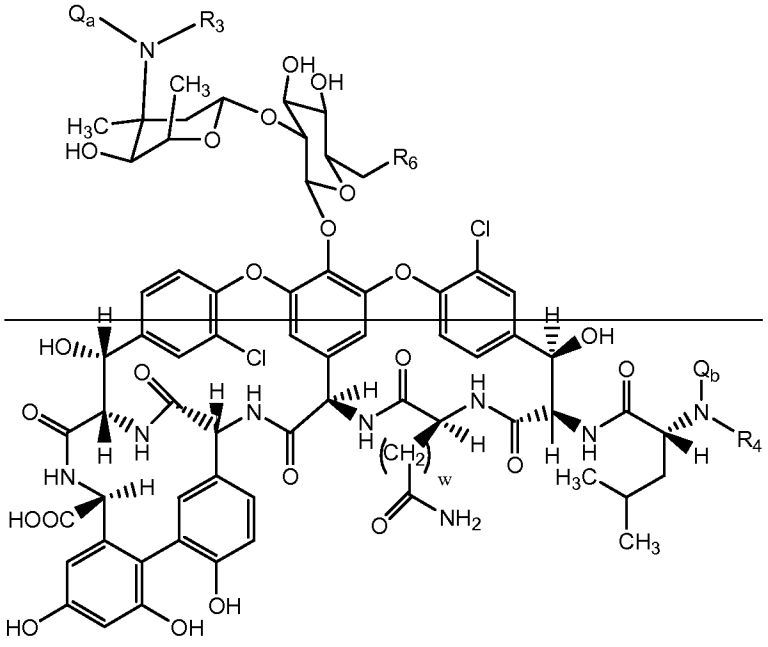
EXAMINER'S AMENDMENT

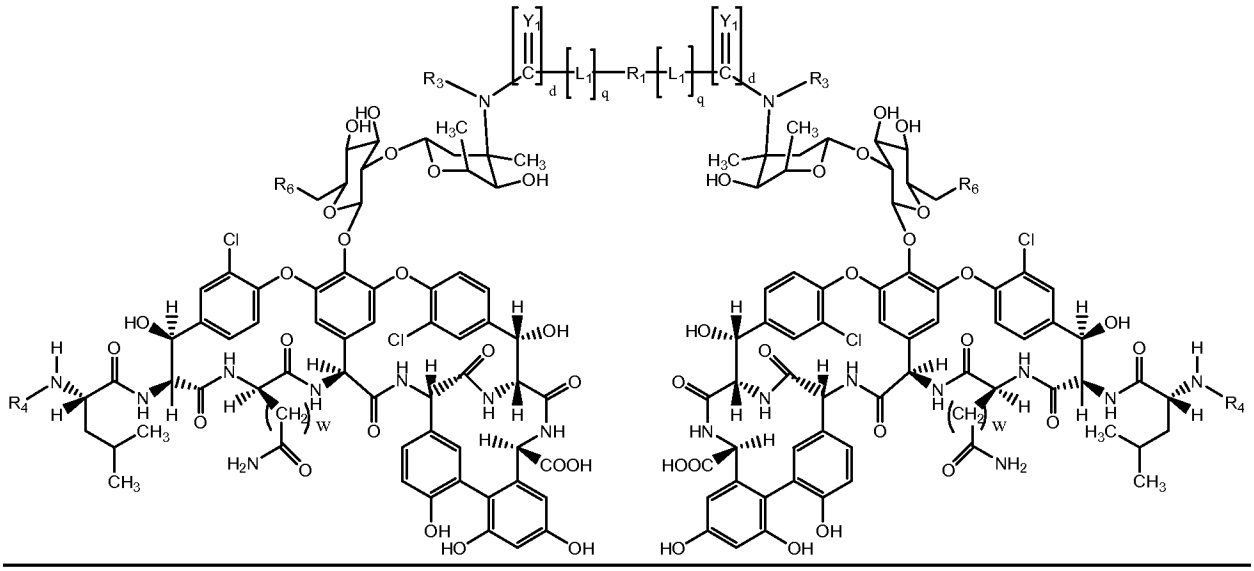
An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Hyun Soon Cho (Recognition No. L0306) and Yun H. Choe (Registration No. 61,798) on September 25, 2008

The application has been amended and all previously submitted claims are replaced with the following.

1. (Currently Amended) A compound of the formula ~~(I)~~





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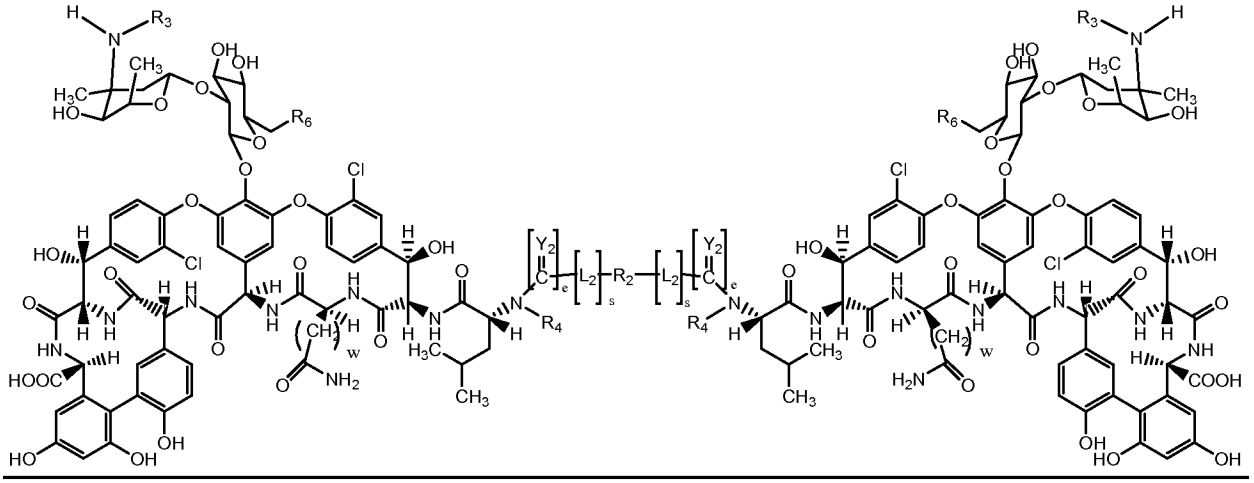


wherein:

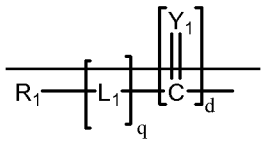
R_3-R_5 are each independently selected from among hydrogen, C_{1-6} alkyls, C_{3-12} branched alkyls, C_{3-8} cycloalkyls, C_{1-6} substituted alkyls, C_{3-8} substituted cycloalkyls, aryls, substituted aryls, aralkyls, C_{1-6} alkenyls, C_{3-12} branched alkenyls, C_{1-6} alkynyls, C_{3-12} branched alkynyls,

C_{1-6} heteroalkyls, substituted C_{1-6} hetero-alkyls, C_{1-6} alkoxyalkyl, phenoxyalkyl and C_{1-6} heteroalkoxys;

R_6 is OH, NH-aryl, NH-aralkyl, or NH-C_{1-12} alkyl,

w is 1 or 2;

~~Q_a is H or~~



~~wherein:~~

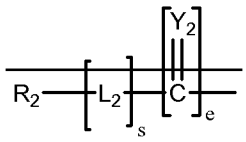
R_1 is a polyalkylene oxide ~~wherein R_1 comprise a linear, branched or multi-armed polyalkylene oxide~~;

Y_1 is O, S or NR_5; ~~and~~

q is 0, 1 or 2 ~~0 or a positive integer~~;

d is 0 or 1; ~~and~~

~~Q_b is H or~~



~~wherein:~~

R_2 is a polyalkylene oxide ~~wherein R_2 comprise a linear, branched or multi-armed polyalkylene oxide~~;

Y_2 is O, S or NR_5; ~~and~~

s is 0, 1 or 2 ~~0 or a positive integer~~;

e is 0 or 1; and

~~wherein~~

$L_{1\text{-}2}$ are independently selected from the group consisting of amino acids and

$-[C(O)]_vNR_{25}(CR_{26}R_{27})_t-$,

$-[C(O)]_v(CR_{26}R_{27})_t-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27}O)_t-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27}O)_t(CR_{28}R_{29})_yO-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27}O)_t(CR_{28}R_{29})_y-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27})_tO-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27})_t(CR_{28}CR_{29}O)_yNR_{30}-$,

$-[C(O)]_vO(CR_{26}R_{27})_tNR_{30}-$,

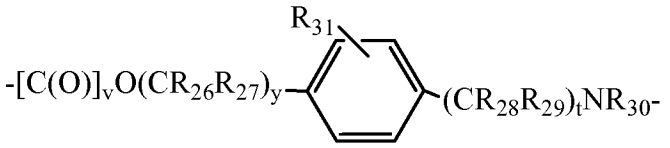
$-[C(O)]_vO(CR_{26}R_{27})_tO-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27})_tNR_{30}-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27})_t(CR_{28}CR_{29}O)_y-$,

$-[C(O)]_vNR_{25}(CR_{26}CR_{27}O)_t(CR_{28}R_{29})_yNR_{30}-$,

$-[C(O)]_vO(CR_{26}CR_{27}O)_tNR_{30}-$,



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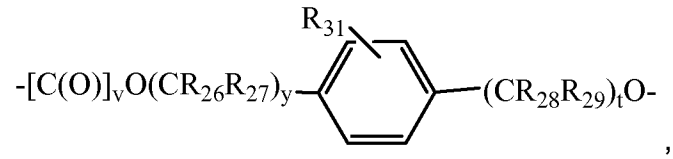

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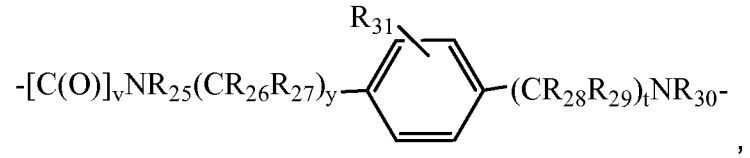

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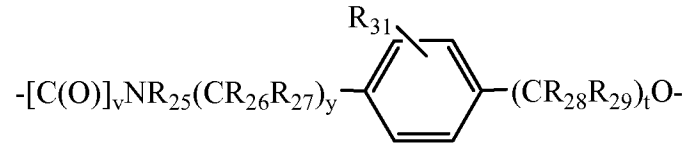


,

wherein:

R_{25}-R_{30} are independently selected from the group consisting of hydrogen, C_{1-6} alkyls, C_{2-6} alkenyls, C_{2-6} alkynyls, C_{3-19} branched alkyls, C_{3-8} cycloalkyls,

C_{1-6} substituted alkyls, C_{2-6} substituted alkenyls, C_{2-6} substituted alkynyls, C_{3-8} substituted cycloalkyls, aryls, substituted aryls, aralkyls, C_{1-6} heteroalkyls, substituted C_{1-6} hetero-alkyls, C_{1-6} alkoxyalkyl, phenoxyalkyl and

C_{1-6} heteroalkoxys;

R_{31} is selected from the group consisting of hydrogen, C_{1-6} alkyls,

C_{2-6} alkenyls, C_{2-6} alkynyls, C_{3-19} branched alkyls, C_{3-8} cycloalkyls, C_{1-6} substituted alkyls, C_{2-6} substituted alkenyls, C_{2-6} substituted alkynyls, C_{3-8} substituted cycloalkyls, aryls, substituted aryls, aralkyls, C_{1-6} heteroalkyls, substituted

C_{1-6} heteroalkyls, C_{1-6} alkoxyalkyl, phenoxyalkyl and C_{1-6} heteroalkoxys, NO_2, haloalkyl and halogen;

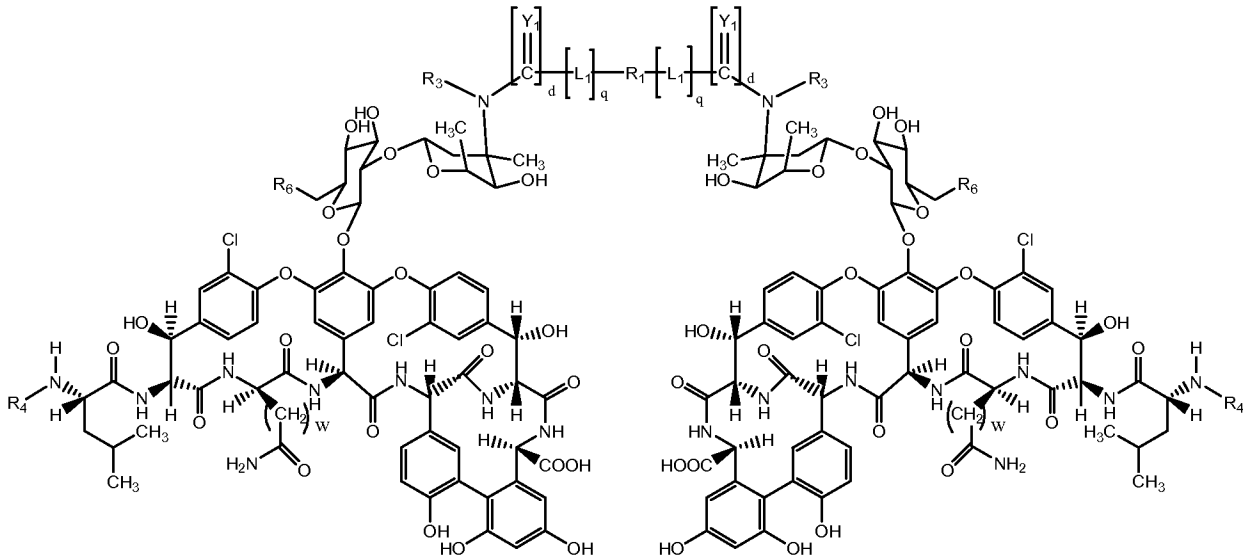
t and y are individually selected positive ~~integers,~~ integers ranging from about 1 to about 4; and

v is 0 or 1 [[;]]

~~provided that Q_a and Q_b are both not simultaneously H~~.

2-3. (Cancelled)

4. (Currently Amended) A compound of claim 1 ~~2~~ of the formula:



wherein:

Y_1 is O;

R_3 and R_4 are each independently hydrogen or CH_3;

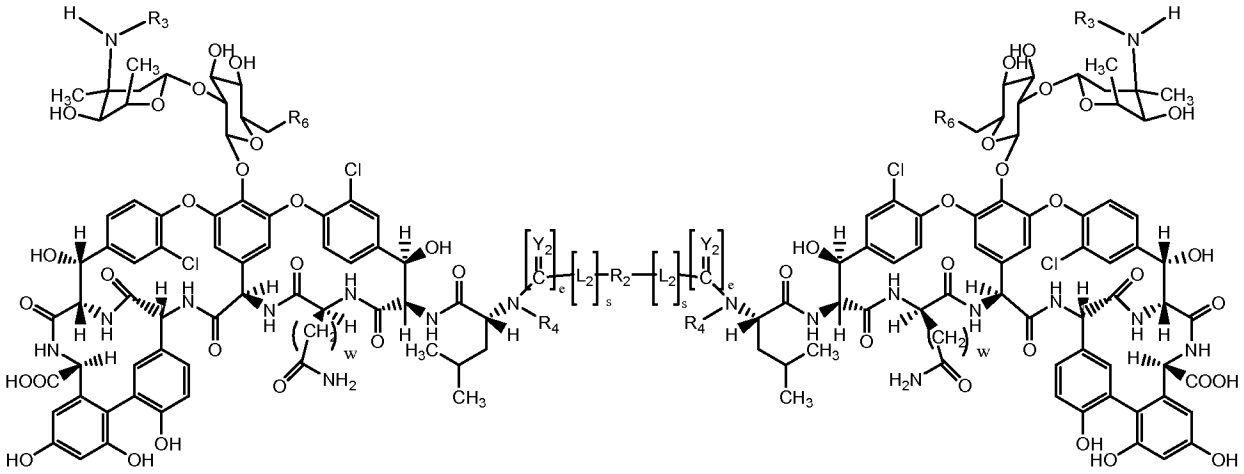
R_6 is OH or NH-aryl;

q is 0-2; and

w is 1.

5. (Currently Amended) A compound of claim 1 ~~3~~ of the formula:

~~(ii) R_2 (ii)~~



wherein:

Y_2 is O;

R_3 and R_4 are each independently hydrogen or CH_3;

R_6 is OH or NH-aryl;

s is 0-2; and

w is 1.

6. (Original) The compound of claim 1 wherein:

Y_1 and Y_2 are independently O;

R_3 and R_4 are each independently hydrogen or CH_3;

R_6 is OH or NH-aryl;

q and s are independently 0-2; and

w is 1.

7. (Cancelled)

8. (Previously Presented) The compound of claim 1 wherein the amino acid is selected from the group consisting of alanine, valine, leucine, isoleucine, glycine, serine, threonine, methionine, cysteine, phenylalanine, tyrosine, tryptophan, aspartic acid, glutamic acid, lysine, arginine, histidine and proline.

9. (Cancelled)

10. (Previously Presented) The compound of claim 1, wherein said polyalkylene oxide comprises polyethylene glycol.

11. (Currently Amended) The compound of claim 1, wherein said linear polyalkylene oxide is selected from the group consisting of:

~~A-O-(CH$_2$CH$_2$O)$_x$-~~

O-(CH$_2$CH$_2$O)$_x$-,

~~A-O-(CH$_2$CH$_2$O)$_x$-CH$_2$C(O)-O-,~~

~~A-O-(CH$_2$CH$_2$O)$_x$-CH$_2$CH$_2$-NR$_7$-,~~

~~A-O-(CH$_2$CH$_2$O)$_x$-CH$_2$CH$_2$-SH,~~

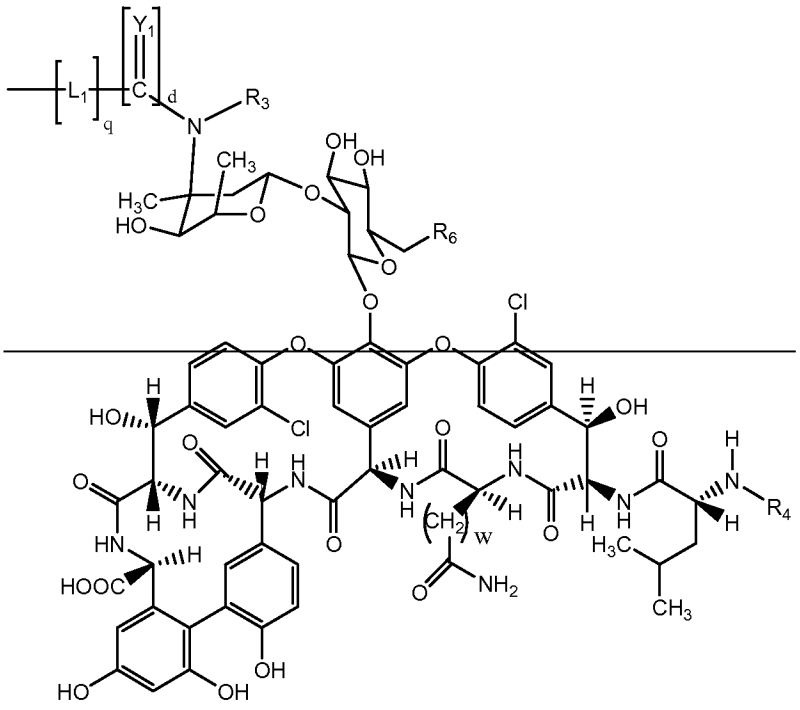
-O-C(O)CH$_2$-O-(CH$_2$CH$_2$O)$_x$-CH$_2$C(O)-O-,

-NR$_7$CH$_2$CH$_2$-O-(CH$_2$CH$_2$O)$_x$-CH$_2$CH$_2$NR$_7$-, and

-SHCH$_2$CH$_2$-O-(CH$_2$CH$_2$O)$_x$-CH$_2$CH$_2$SH-,

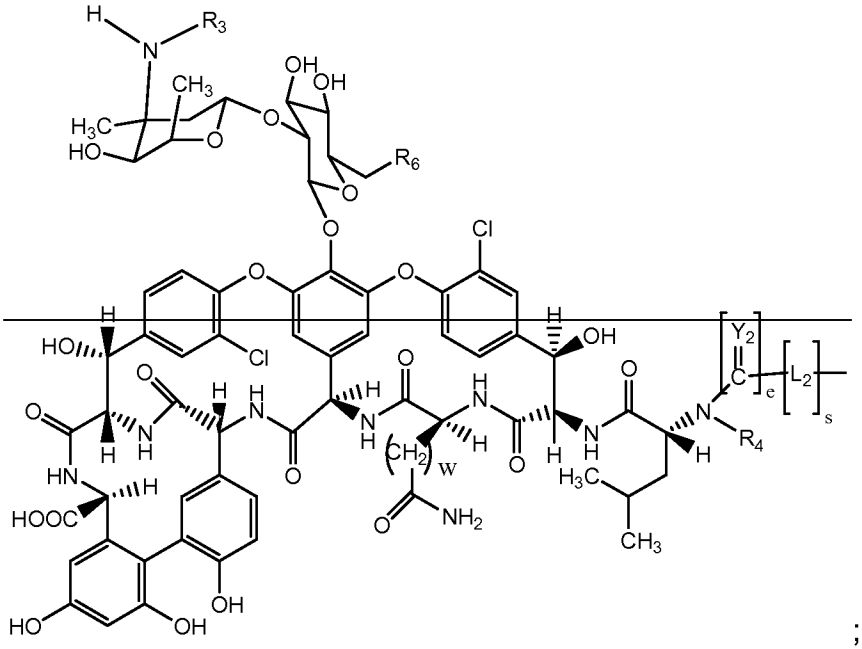
wherein

~~A is a capping group selected from the group consisting of OH, NH$_2$, SH, CO$_2$H, C$_{1-6}$ alkyl moieties, a compound of the formula:~~



~~and~~

~~a compound of the formula:~~



;

R_7 is selected from that which defines R_3, and

x is an integer of from about 10 to about 2,300 ~~the degree of polymerization~~.

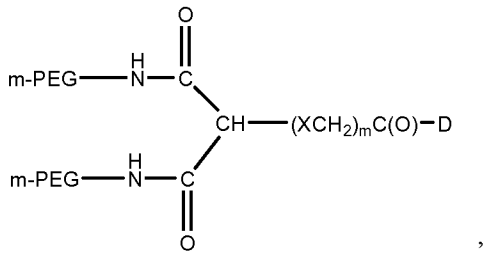
12. (Previously Presented) The compound of claim 1, wherein said polyalkylene oxide has a total number average molecular weight of from about 5,000 to about 100,000 daltons.

13. (Previously Presented) The compound of claim 1, wherein said polyalkylene oxide has a total number average molecular weight of from about 10,000 to about 80,000 daltons.

14. (Previously Presented) The compound of claim 1, wherein said polyalkylene oxide has a total number average molecular weight of from about 20,000 to about 40,000 daltons.

15-18. (Cancelled)

19. (Currently Amended) A ~~The~~ compound of the formula ~~claim 1~~, selected from the group consisting of:



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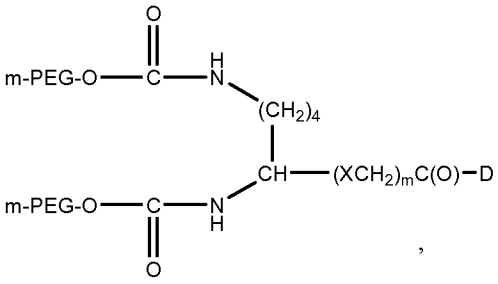

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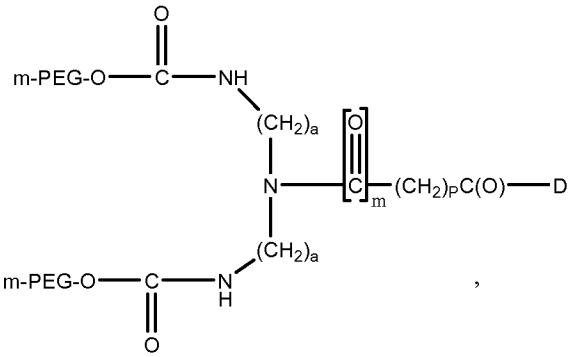

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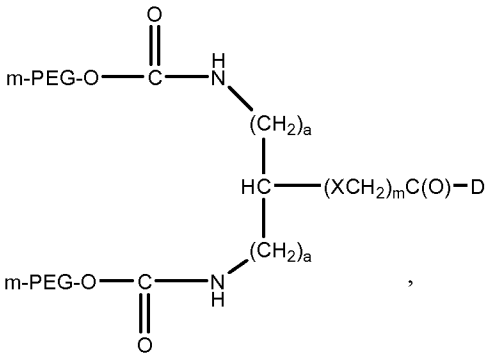
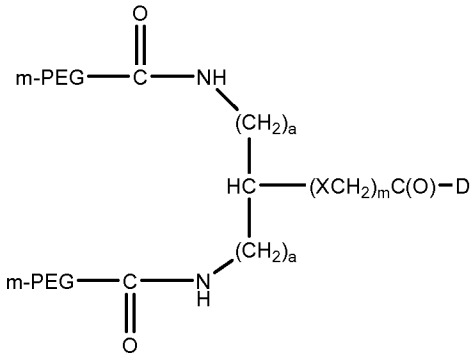


,

and



,

wherein

(a) is an integer of from about 1 to about 5;

X is O, NR_8, S, SO or SO_2; where R_8 is H, C_{1-8} alkyl, C_{1-8} branched alkyl, C_{1-8} substituted alkyl, aryl or aralkyl;

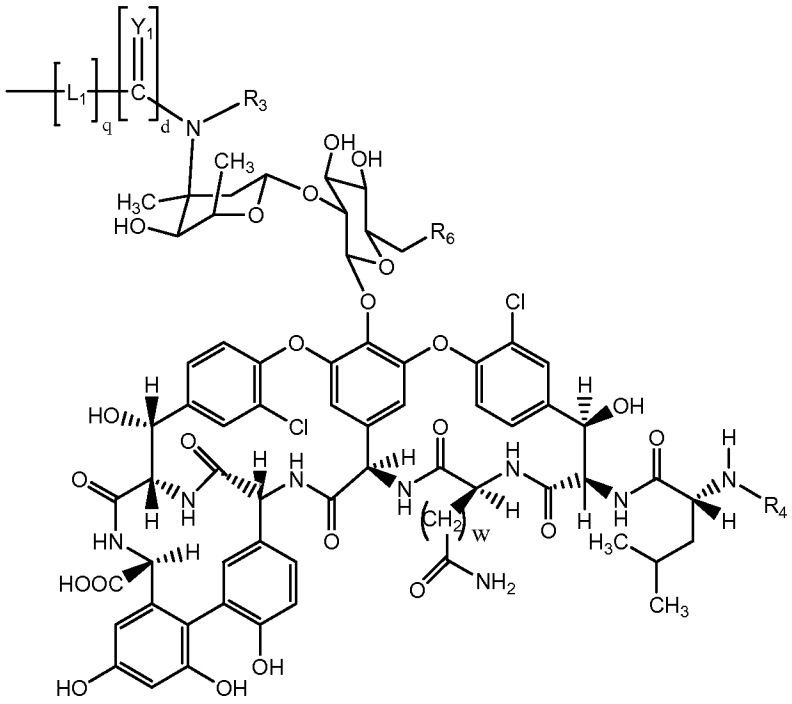
(m) is 0 or 1;

(p) is a positive integer <u>of from about 1 to about 6</u>;

D is ~~a moiety of the formula~~ V_a or V_b,

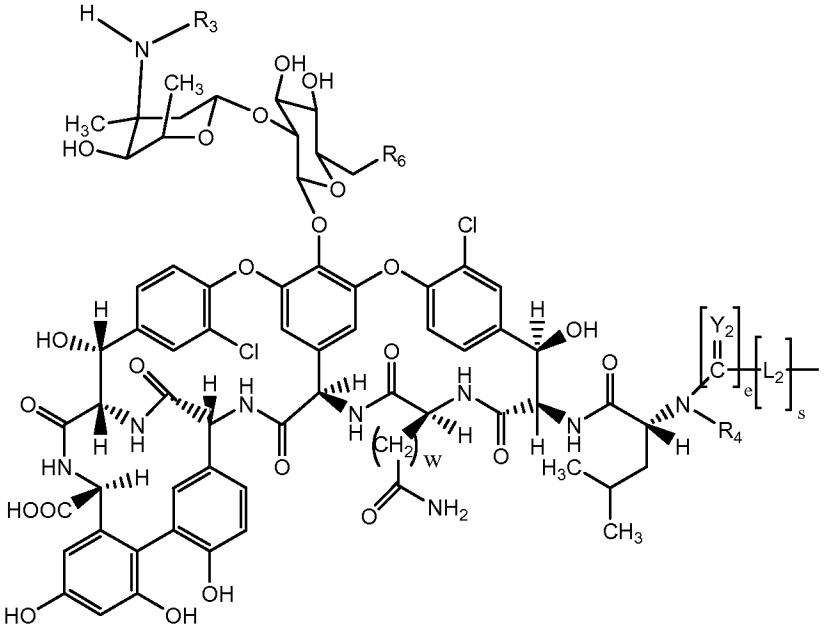
wherein

V_a is ~~a moiety of the formula:~~



; and

V_b is a moiety of the formula:



wherein

R_3-R_5 are each independently selected from among hydrogen, C_{1-6} alkyls, C_{3-12} branched alkyls, C_{3-8} cycloalkyls, C_{1-6} substituted alkyls, C_{3-8}

substituted cycloalkyls, aryls, substituted aryls, aralkyls, C_{1-6} alkenyls, C_{3-12} branched alkenyls, C_{1-6} alkynyls, C_{3-12} branched alkynyls,C_{1-6} heteroalkyls, substituted

C_{1-6} hetero-alkyls, C_{1-6} alkoxyalkyl, phenoxyalkyl and C_{1-6} heteroalkoxys;

R_6 is OH, NH-aryl, NH-aralkyl, or NH-C_{1-12} alkyl,

w is 1 or 2;

Y_1 is O, S or NR_5;

q is 0, 1or 2;

d is 0 or 1;

Y_2 is O, S or NR_5;

s is 0, 1 or 2;

e is 0 or 1; and

L_{1-2} are independently selected from the group consisting of amino acids and

$-[C(O)]_vNR_{25}(CR_{26}R_{27})_t-$,

$-[C(O)]_v(CR_{26}R_{27})_t-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27}O)_t-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27}O)_t(CR_{28}R_{29})_vO-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27}O)_t(CR_{28}R_{29})_v-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27})_tO-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27})_t(CR_{28}CR_{29}O)_vNR_{30}-$,

$-[C(O)]_vO(CR_{26}R_{27})_tNR_{30}-$,

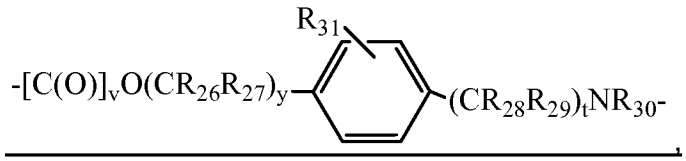
$-[C(O)]_vO(CR_{26}R_{27})_tO-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27})_tNR_{30}-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27})_t(CR_{28}CR_{29}O)_v-$,

$-[C(O)]_vNR_{25}(CR_{26}CR_{27}O)_t(CR_{28}R_{29})_vNR_{30}-$,

$-[C(O)]_vO(CR_{26}CR_{27}O)_tNR_{30}-$,



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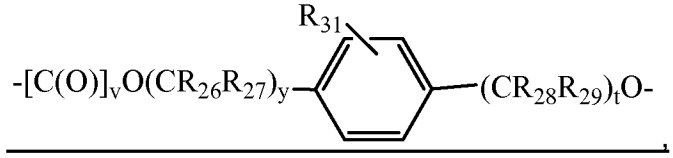

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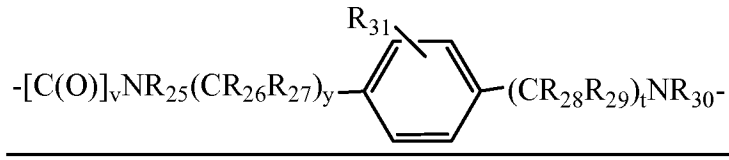
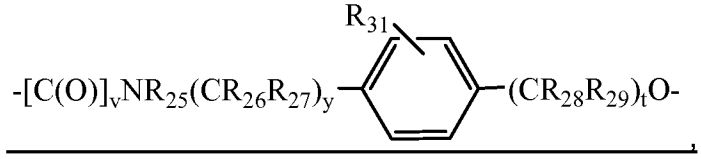


, and



,

wherein:

R_{25}-R_{30} are independently selected from the group consisting of hydrogen, C_{1-6} alkyls, C_{2-6} alkenyls, C_{2-6} alkynyls, C_{3-19} branched alkyls, C_{3-8} cycloalkyls, C_{1-6} substituted alkyls, C_{2-6} substituted alkenyls, C_{2-6} substituted alkynyls, C_{3-8} substituted cycloalkyls, aryls, substituted aryls, aralkyls, C_{1-6} heteroalkyls, substituted C_{1-6} heteroalkyls, C_{1-6} alkoxyalkyl, phenoxyalkyl and C_{1-6} heteroalkoxys;

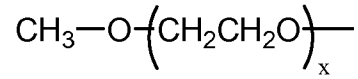
R_{31} is selected from the group consisting of hydrogen, C_{1-6} alkyls,

C_{2-6} alkenyls, C_{2-6} alkynyls, C_{3-19} branched alkyls, C_{3-8} cycloalkyls, C_{1-6} substituted alkyls, C_{2-6} substituted alkenyls, C_{2-6} substituted alkynyls, C_{3-8} substituted cycloalkyls, aryls, substituted aryls, aralkyls, C_{1-6} heteroalkyls, substituted C_{1-6} heteroalkyls, C_{1-6} alkoxyalkyl, phenoxyalkyl and C_{1-6} heteroalkoxys, NO_2, haloalkyl and halogen;

t and y are individually selected positive integers ranging from about 1 to about 4; and

v is 0 or 1;

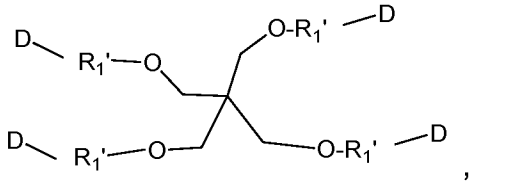
mPEG is



wherein x is an integer from about 10 to about 2,300, and has a number average molecular weight of from about 2,000 to about 100,000 daltons.

20. (Original) The compound of claim 19, wherein mPEG has a number average molecular weight of from about 20,000 to about 40,000 daltons.

21. (Currently Amended) A ~~The~~ compound of the formula ~~claim 1~~, selected from the group consisting of ~~the formulas~~:



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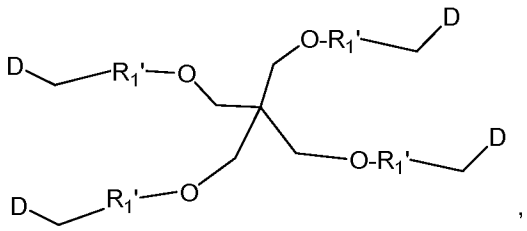

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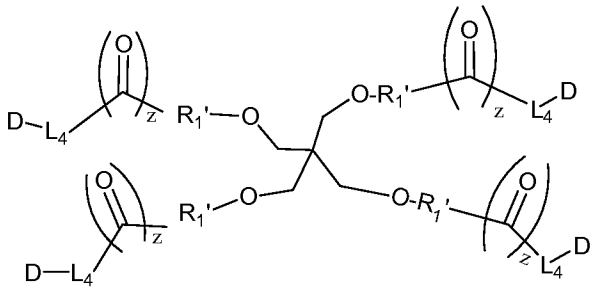
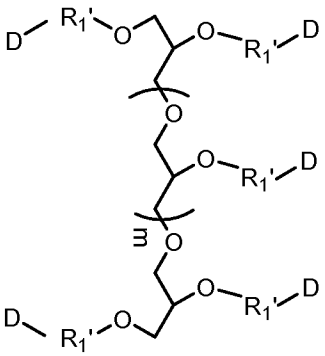


and



wherein,

m is 0-4;

z is 0 or 1;

L_4 is the same as that which defines L_{1-2};

D is ~~a moiety of the formula~~ V_a or V_b;

R_1' is

$-(CH_2CH_2O)_x-$,

$-(CH_2CH_2O)_x-CH_2C(O)-$,

$-(CH_2CH_2O)_x-CH_2CH_2NR_7-$ or

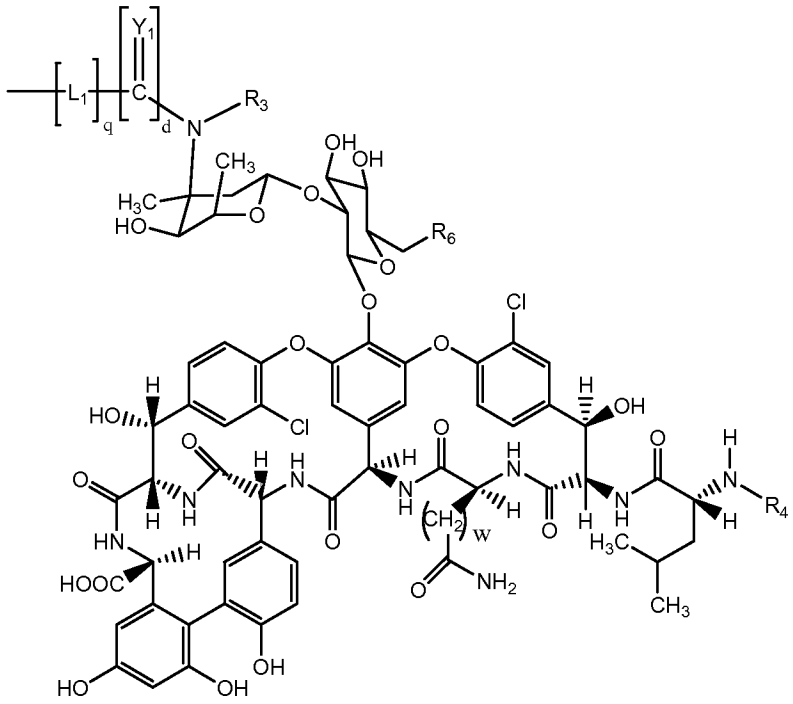
$-(CH_2CH_2O)_x-CH_2CH_2SH-$,

wherein

x is an integer of from about 10 to about 2,300 ~~a positive integer~~;

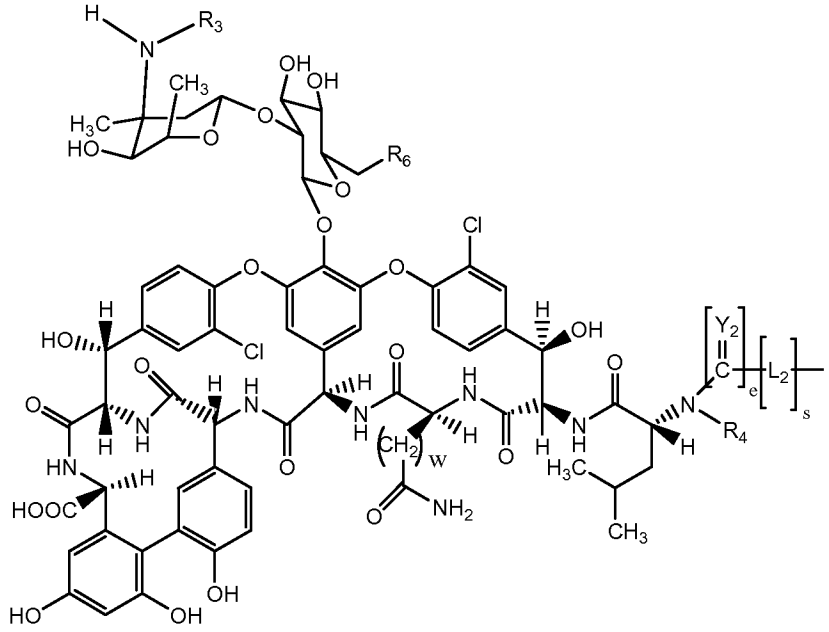
R_7 is selected from that which defines R_3;

V_a is ~~a moiety of the formula:~~



; and

V_b is ~~a moiety of the formula:~~



wherein

R_3-R_5 are each independently selected from among hydrogen, C_{1-6} alkyls, C_{3-12} branched alkyls, C_{3-8} cycloalkyls, C_{1-6} substituted alkyls, C_{3-8}

substituted cycloalkyls, aryls, substituted aryls, aralkyls, C_{1-6} alkenyls, C_{3-12} branched alkenyls, C_{1-6} alkynyls, C_{3-12} branched alkynyls,C_{1-6} heteroalkyls, substituted

C_{1-6} hetero-alkyls, C_{1-6} alkoxyalkyl, phenoxyalkyl and C_{1-6} heteroalkoxys;

R_6 is OH, NH-aryl, NH-aralkyl, or NH-C_{1-12} alkyl,

w is 1 or 2;

Y_1 is O, S or NR_5;

q is 0, 1 or 2;

d is 0 or 1; and

Y_2 is O, S or NR_5;

s is 0, 1 or 2;

e is 0 or 1; and

L_{1-2} are independently selected from the group consisting of amino acids and

$-[C(O)]_vNR_{25}(CR_{26}R_{27})_t-$,

$-[C(O)]_v(CR_{26}R_{27})_t-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27}O)_t-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27}O)_t(CR_{28}R_{29})_vO-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27}O)_t(CR_{28}R_{29})_v-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27})_tO-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27})_t(CR_{28}CR_{29}O)_vNR_{30}-$,

$-[C(O)]_vO(CR_{26}R_{27})_tNR_{30}-$,

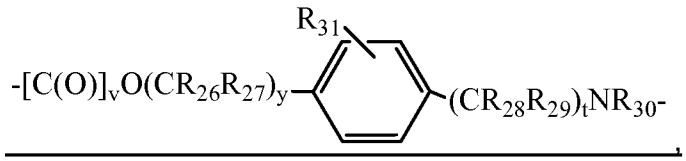
$-[C(O)]_vO(CR_{26}R_{27})_tO-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27})_tNR_{30}-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27})_t(CR_{28}CR_{29}O)_v-$,

$-[C(O)]_vNR_{25}(CR_{26}CR_{27}O)_t(CR_{28}R_{29})_vNR_{30}-$,

$-[C(O)]_vO(CR_{26}CR_{27}O)_tNR_{30}-$,



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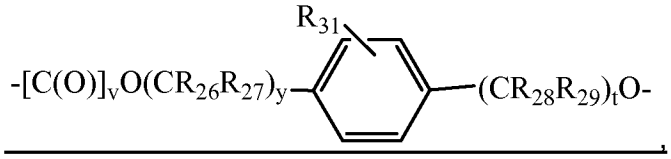

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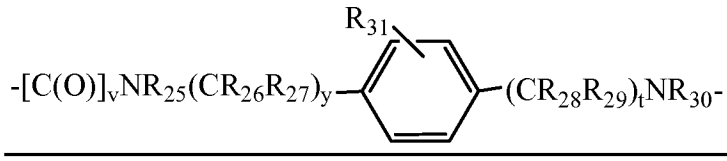

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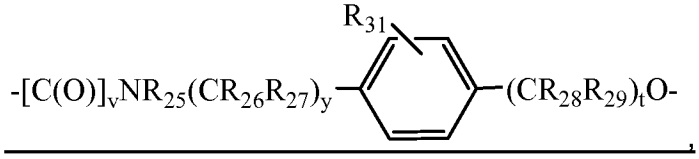


,

wherein:

R_{25}-R_{30} are independently selected from the group consisting of hydrogen, C_{1-6} alkyls, C_{2-6} alkenyls, C_{2-6} alkynyls, C_{3-19} branched alkyls, C_{3-8} cycloalkyls, C_{1-6} substituted alkyls, C_{2-6} substituted alkenyls,

C_{2-6} substituted alkynyls, C_{3-8} substituted cycloalkyls, aryls, substituted aryls, aralkyls, C_{1-6} heteroalkyls, substituted C_{1-6} hetero-alkyls,

C_{1-6} alkoxyalkyl, phenoxyalkyl and C_{1-6} heteroalkoxys;

R_{31} is selected from the group consisting of hydrogen, C_{1-6} alkyls,

C_{2-6} alkenyls, C_{2-6} alkynyls, C_{3-19} branched alkyls, C_{3-8} cycloalkyls, C_{1-6} substituted alkyls, C_{2-6} substituted alkenyls, C_{2-6} substituted alkynyls, C_{3-8} substituted cycloalkyls, aryls, substituted aryls, aralkyls,

C_{1-6} heteroalkyls, substituted C_{1-6} heteroalkyls, C_{1-6} alkoxyalkyl, phenoxyalkyl and C_{1-6} heteroalkoxys, NO_2, haloalkyl and halogen;

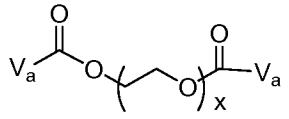
t and y are individually selected positive integers ranging from about 1 to about 4; and

v is 0 or 1.

22. (Previously Presented) The compound of claim 21, wherein x is a positive integer such that the polymeric portion has a number average molecular weight of from about 2,000 to about 100,000 daltons.

23. (Previously Presented) The compound of claim 21, wherein x is a positive integer such that the polymeric portion has a number average molecular weight of from about 20,000 to about 40,000 daltons.

24. (Currently Amended) A compound selected from the group consisting of:



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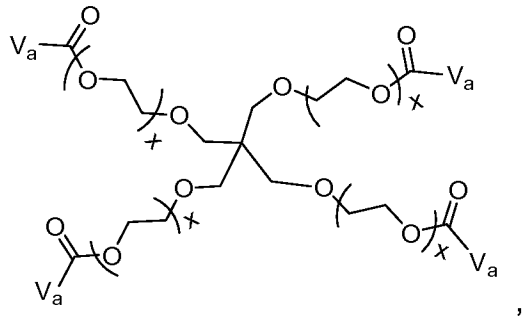

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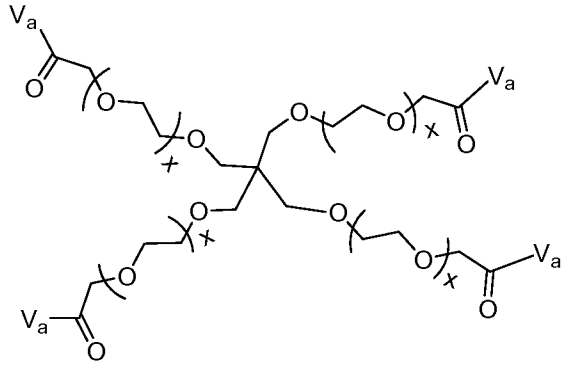

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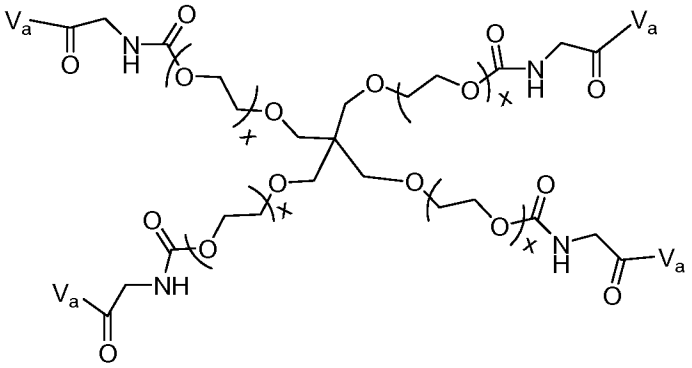

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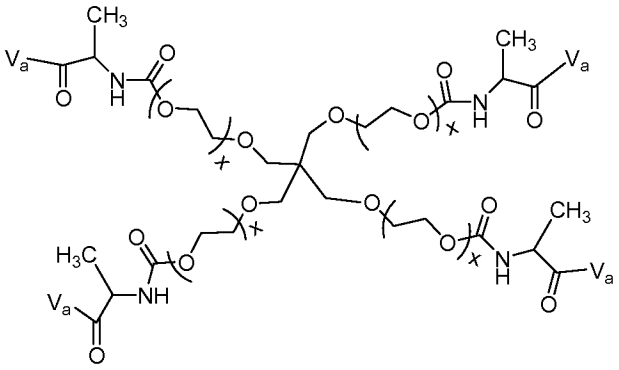

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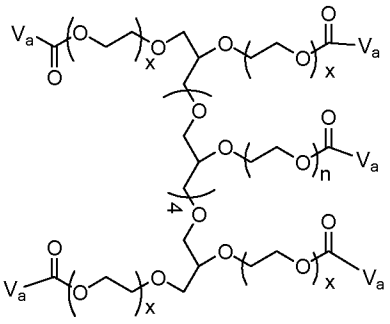

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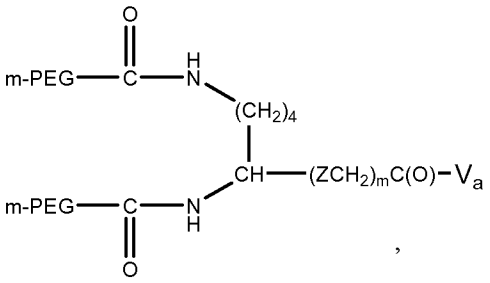

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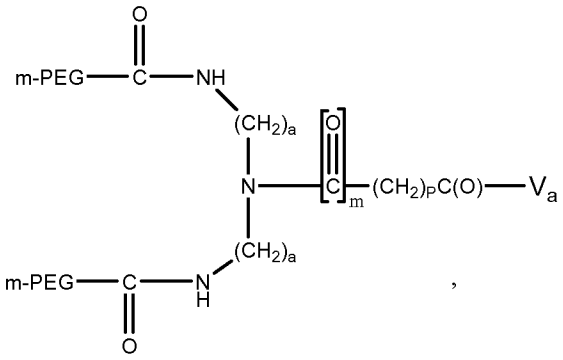

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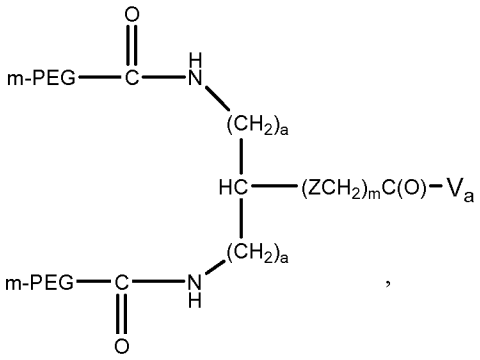


,

wherein:

mPEG is

CH_3-O-$(CH_2CH_2O)_x$-;

(a) is an integer of from about 1 to about 5;

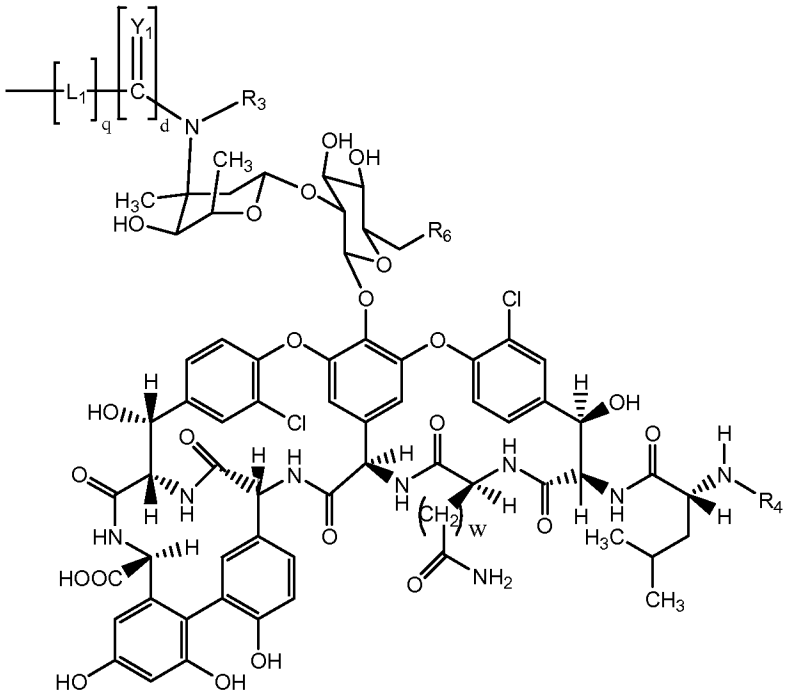
Z is O, NR_8, S, SO or SO_2; where R_8 is H, C_{1-8} alkyl, C_{1-8} branched alkyl, C_{1-8} substituted alkyl, aryl or aralkyl;

(m) is 0 or 1;

(p) is a positive integer of from about 1 to about 6;

x is an integer of from about 10 to about 2,300; and

V_a is ~~a moiety of the formula:~~



wherein:

Y_1 is O;

L_1 is selected from the group consisting of amino acids and

$-[C(O)]_vNR_{25}(CR_{26}R_{27})_t-$,

$-[C(O)]_v(CR_{26}R_{27})_t-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27}O)_t-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27}O)_t(CR_{28}R_{29})_yO-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27}O)_t(CR_{28}R_{29})_y-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27})_tO-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27})_t(CR_{28}CR_{29}O)_yNR_{30}-$,

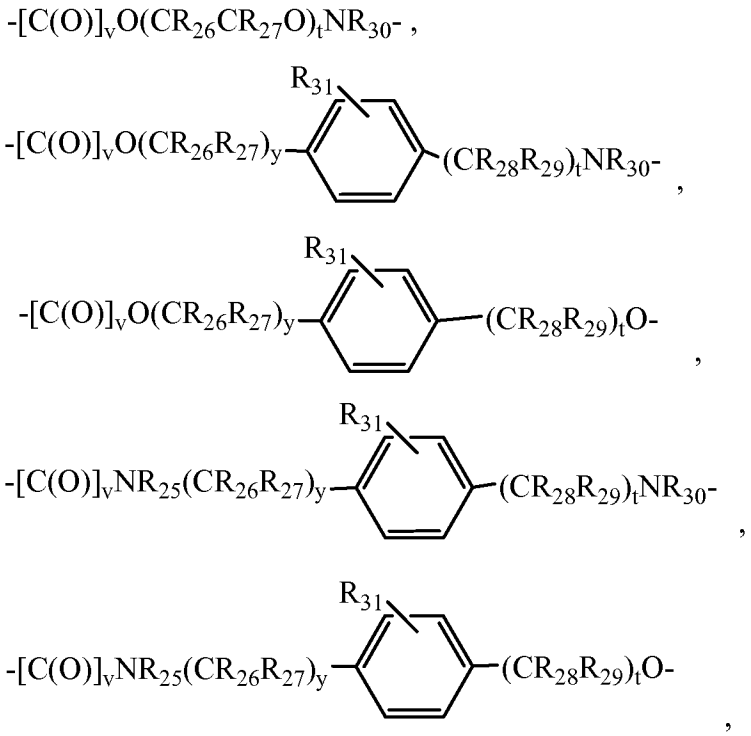
$-[C(O)]_vO(CR_{26}R_{27})_tNR_{30}-$,

$-[C(O)]_vO(CR_{26}R_{27})_tO-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27})_tNR_{30}-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27})_t(CR_{28}CR_{29}O)_y-$,

$-[C(O)]_vNR_{25}(CR_{26}CR_{27}O)_t(CR_{28}R_{29})_yNR_{30}-$,



wherein:

R_{25}-R_{30} are independently selected from the group consisting of hydrogen, C_{1-6} alkyls, C_{2-6} alkenyls, C_{2-6} alkynyls, C_{3-19} branched alkyls, C_{3-8} cycloalkyls,

C_{1-6} substituted alkyls, C_{2-6} substituted alkenyls, C_{2-6} substituted alkynyls, C_{3-8} substituted cycloalkyls, aryls, substituted aryls, aralkyls, C_{1-6} heteroalkyls, substituted C_{1-6} hetero-alkyls, C_{1-6} alkoxyalkyl, phenoxyalkyl and

C_{1-6} heteroalkoxys;

R_{31} is selected from the group consisting of hydrogen, C_{1-6} alkyls, C_{2-6} alkenyls, C_{2-6} alkynyls, C_{3-19} branched alkyls, C_{3-8} cycloalkyls, C_{1-6} substituted alkyls, C_{2-6} substituted alkenyls, C_{2-6} substituted alkynyls, C_{3-8} substituted cycloalkyls, aryls, substituted aryls, aralkyls, C_{1-6} heteroalkyls, substituted

C_{1-6} heteroalkyls, C_{1-6} alkoxyalkyl, phenoxyalkyl and C_{1-6} heteroalkoxys, NO_2, haloalkyl and halogen;

t and y are individually selected positive integers ranging from about 1 to about 4, and

v is 0 or 1;

R_3 and R_4 are each independently hydrogen or CH_3;

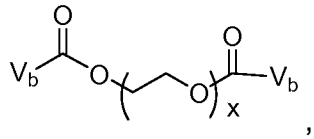
R_6 is OH or NH-aryl;

q is 0-2;

d is 0 or 1; and

w is 1.

25. (Currently Amended) A compound selected from the group consisting of:



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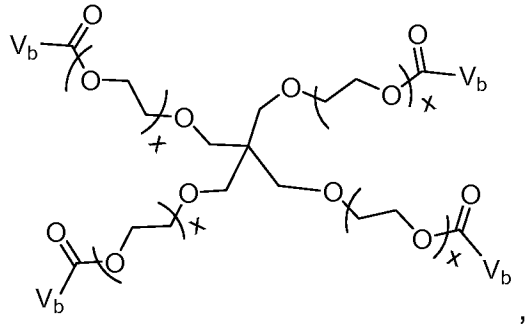

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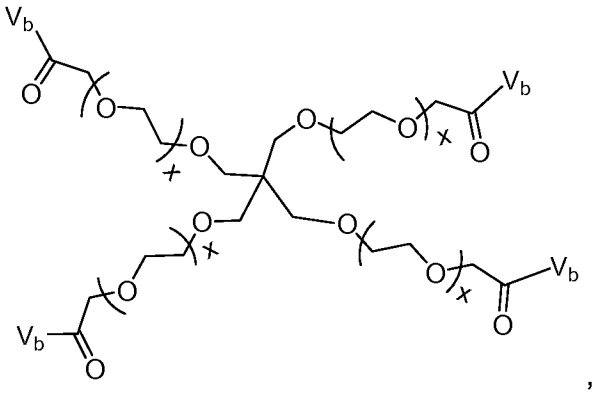

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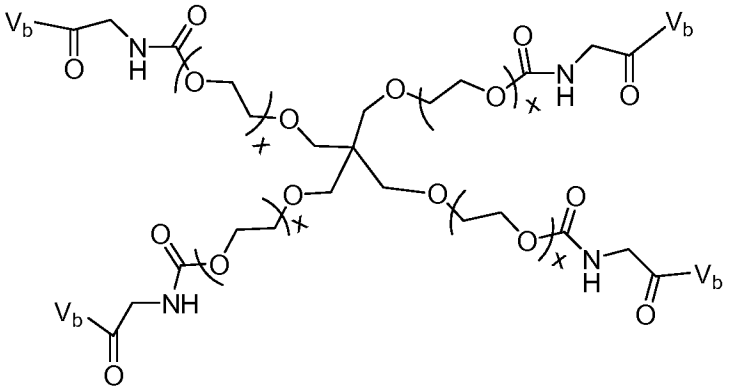

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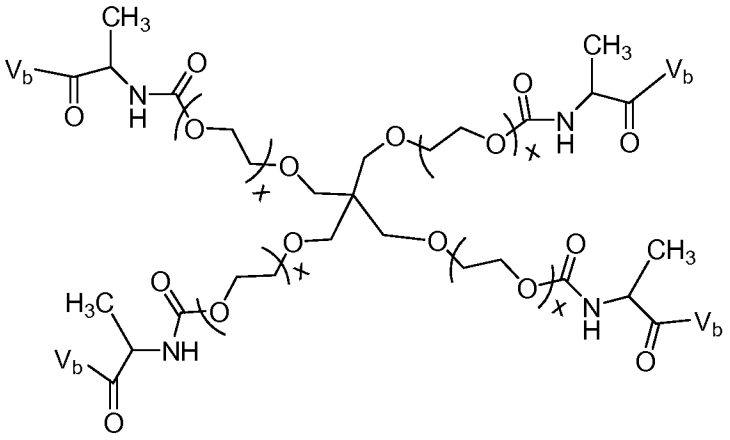

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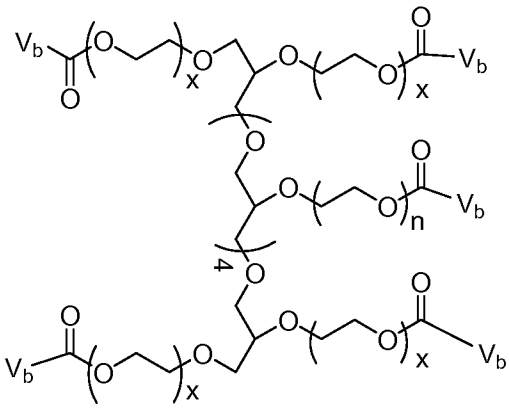

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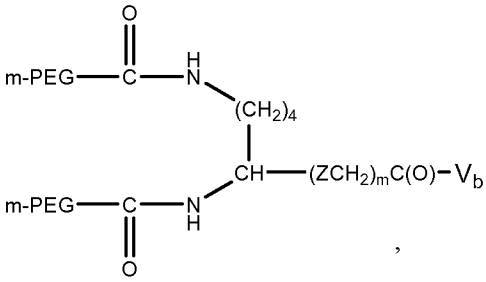

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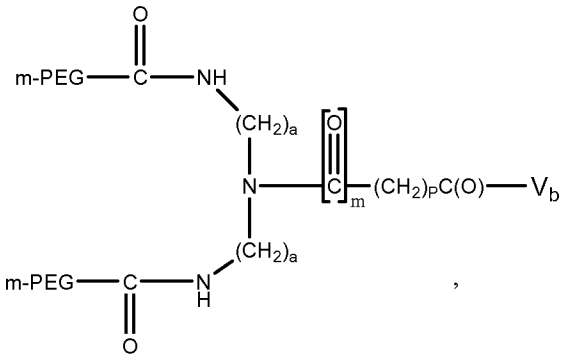

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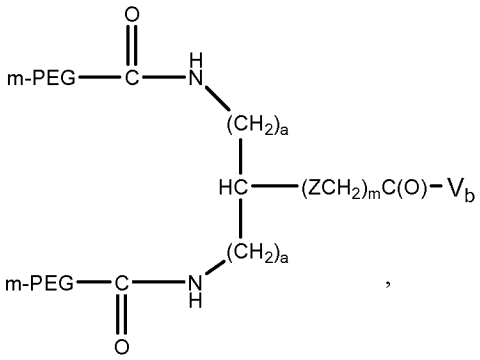


,

wherein:

mPEG is

CH_3-O-$(CH_2CH_2O)_x$-;

(a) is an integer of from about 1 to about 5;

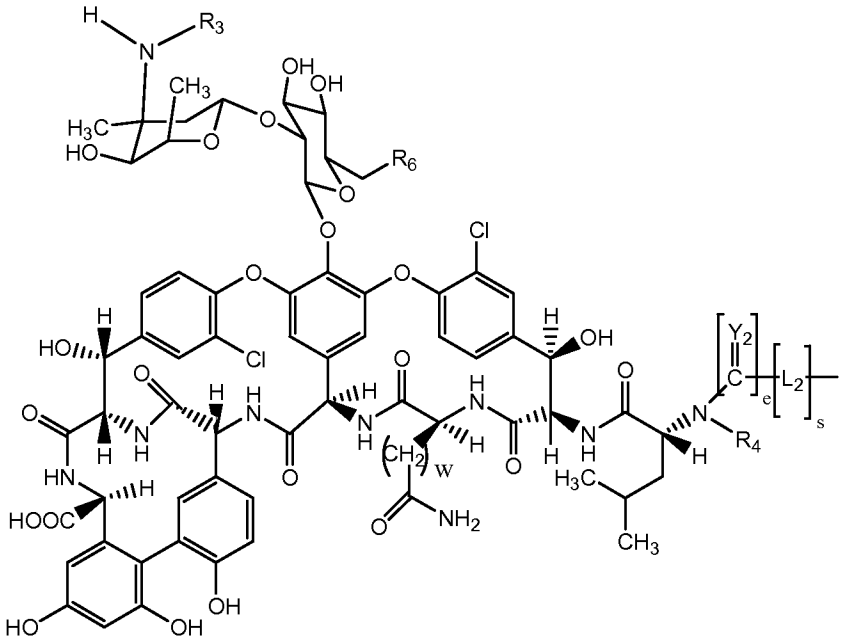
Z is O, NR_8, S, SO or SO_2; where R_8 is H, C_{1-8} alkyl, C_{1-8} branched alkyl, C_{1-8} substituted alkyl, aryl or aralkyl;

(m) is 0 or 1;

(p) is a positive integer, from about 1 to about 6;

x is an integer from about 10 to about 2,300, and

V_b is [[:]]



wherein:

Y_2 is O;

L_2 is a bifunctional linker selected from the group consisting of amino acids and

$-[C(O)]_vNR_{25}(CR_{26}R_{27})_t-$,

$-[C(O)]_v(CR_{26}R_{27})_t-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27}O)_t-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27}O)_t(CR_{28}R_{29})_yO-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27}O)_t(CR_{28}R_{29})_y-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27})_tO-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27})_t(CR_{28}CR_{29}O)_yNR_{30}-$,

$-[C(O)]_vO(CR_{26}R_{27})_tNR_{30}-$,

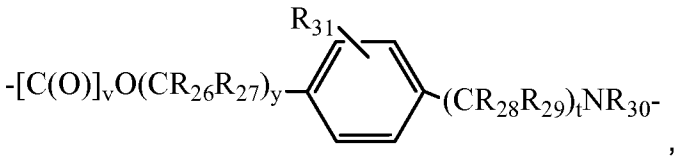
$-[C(O)]_vO(CR_{26}R_{27})_tO-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27})_tNR_{30}-$,

$-[C(O)]_vNR_{25}(CR_{26}R_{27})_t(CR_{28}CR_{29}O)_y-$,

$-[C(O)]_vNR_{25}(CR_{26}CR_{27}O)_t(CR_{28}R_{29})_yNR_{30}-$,

$-[C(O)]_vO(CR_{26}CR_{27}O)_tNR_{30}-$,



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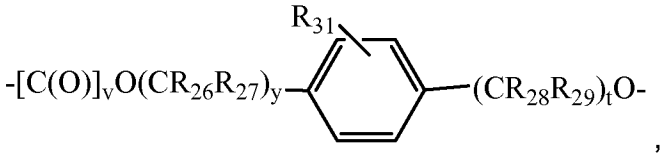

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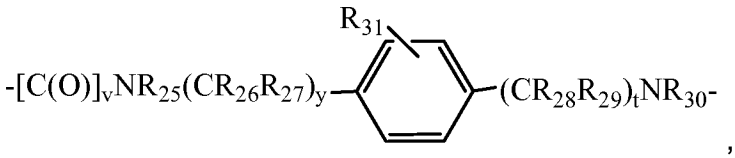

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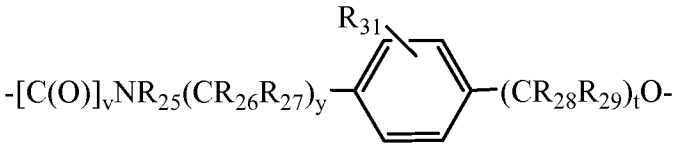


,

wherein:

R_{25}-R_{30} are independently selected from the group consisting of hydrogen, C_{1-6} alkyls, C_{2-6} alkenyls, C_{2-6} alkynyls, C_{3-19} branched alkyls, C_{3-8} cycloalkyls,

C_{1-6} substituted alkyls, C_{2-6} substituted alkenyls, C_{2-6} substituted alkynyls, C_{3-8} substituted cycloalkyls, aryls, substituted aryls, aralkyls, C_{1-6} heteroalkyls, substituted C_{1-6} hetero-alkyls, C_{1-6} alkoxyalkyl, phenoxyalkyl and

C_{1-6} heteroalkoxys;

R_{31} is selected from the group consisting of hydrogen, C_{1-6} alkyls, C_{2-6} alkenyls, C_{2-6} alkynyls, C_{3-19} branched alkyls, C_{3-8} cycloalkyls, C_{1-6} substituted alkyls, C_{2-6} substituted alkenyls, C_{2-6} substituted alkynyls, C_{3-8} substituted cycloalkyls, aryls, substituted aryls, aralkyls, C_{1-6} heteroalkyls, substituted

C_{1-6} heteroalkyls, C_{1-6} alkoxyalkyl, phenoxyalkyl and C_{1-6} heteroalkoxys, NO_2, haloalkyl and halogen;

t and y are individually selected positive integers ranging from about 1 to about 4, and

v is 0 or 1;

R_3 and R_4 are each independently hydrogen or CH_3;

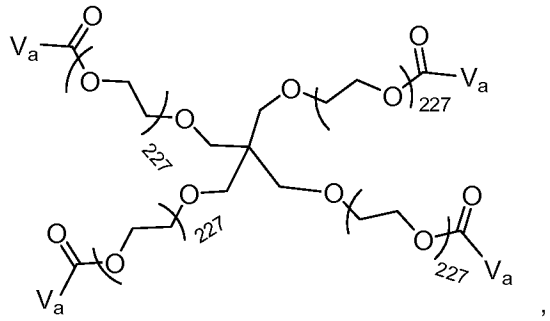
R_6 is OH or NH-aryl;

s is 0-2;

e is 0 or 1; and

w is 1.

26. (Currently Amended) A compound of claim 21 ~~1~~ having the formula:



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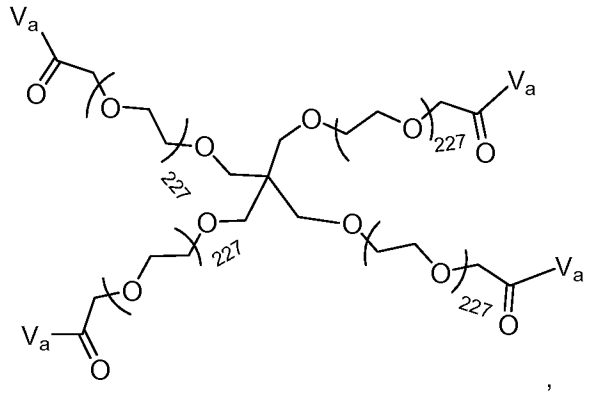

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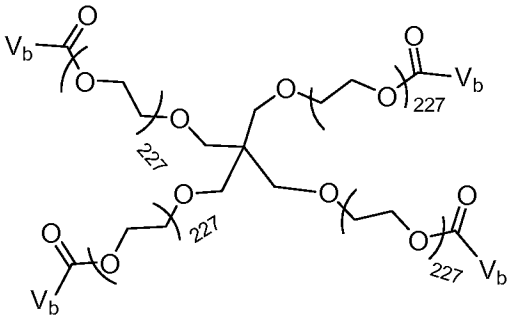

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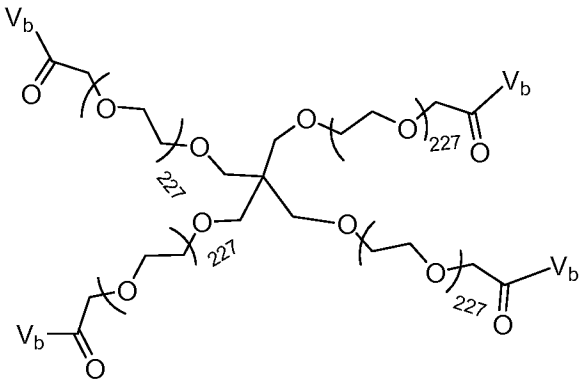

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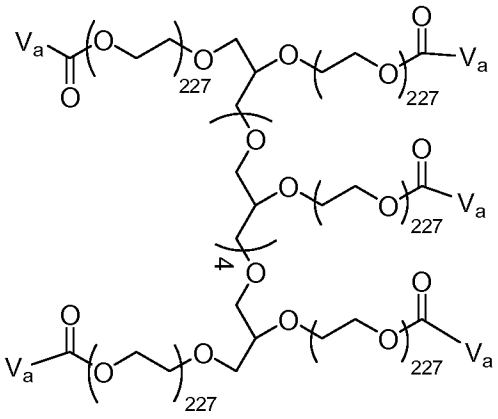
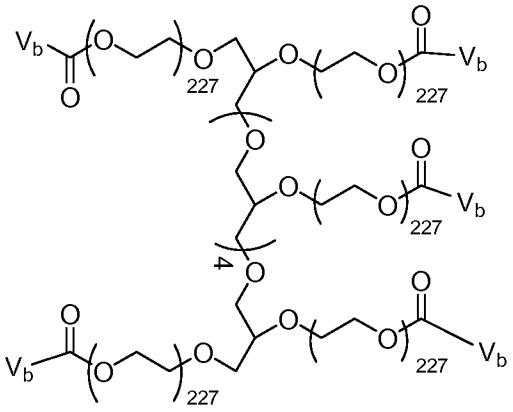
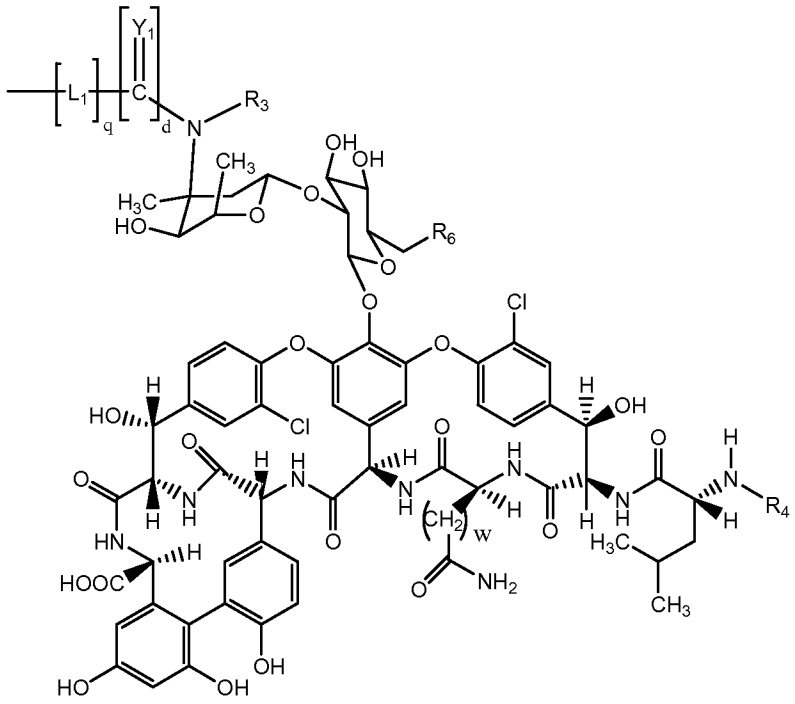


and



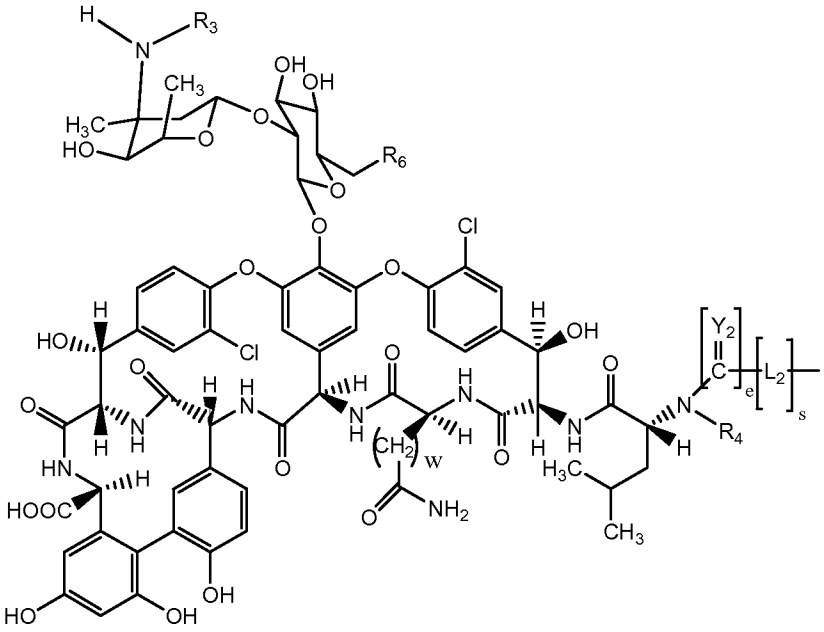
wherein

V_a is ~~a moiety of the formula:~~



; and

V_b is ~~a moiety of the formula:~~



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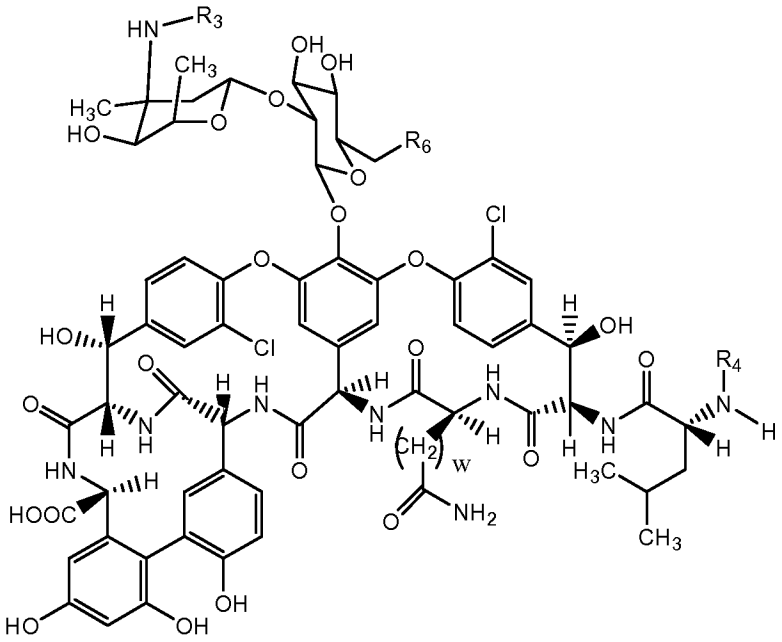
27. (Withdrawn/Currently Amended) A process for preparing a compound ~~conjugate~~ of claim 1 comprising, reacting a vancomycin compound of the formula:



wherein

R_3 and R_4 are independently selected from the group consisting of hydrogen, C_{1-6} alkyls, C_{3-12} branched alkyls, C_{3-8} cycloalkyls, C_{1-6} substituted alkyls, C_{3-8} substituted cycloalkyls, aryls, substituted aryls, aralkyls, C_{1-6} hetero-alkyls, substituted C_{1-6} hetero-alkyls, C_{1-6} alkoxyalkyl, phenoxyalkyl and C_{1-6} heteroalkoxys;

R_6 is OH, NH-aryl, NH-aralkyl, or NH-C_{1-12} alkyl; and

w is 1 or 2;

with a polymer residue containing at least one leaving group capable of reacting with the sugar amino group of said vancomycin compound in the presence of at least about a twenty-fold molar excess of triethylamine and a sufficient amount of dimethylformamide.

28. (Withdrawn/Currently Amended) The process of claim 27 ~~25~~ further comprising reacting said sugar amino compound ~~conjugate~~ with a second activated polymer residue containing at least one leaving group capable of reacting with the N-methyl-amino group of said compound ~~conjugate~~ in the presence of at least about a 5 fold

molar excess of dimethylaminopyridine and a sufficient amount of a solvent mixture of dichloromethane and dimethylformamide.

29. (Withdrawn/Currently Amended) The process of claim 28 ~~26~~, wherein said solvent mixture comprises about equal parts dichloromethane and dimethylformamide.

30. (Withdrawn/Currently Amended) A method of treating a bacterial infection ~~vancomycin susceptible disease~~ in a mammal comprising administering an effective amount of a compound of claim 1, to a mammal in need of such treatment, whereby, the compound of claim 1 undergoes degradation and releases vancomycin ~~or a vancomycin derivative~~ *in vivo*.

31. (Withdrawn/Currently Amended) A method of treating a bacterial infection ~~vancomycin susceptible disease~~ in a mammal comprising administering an effective amount of a compound of claim 19 ~~24~~, to a mammal in need of such treatment, whereby, the compound of claim 19 ~~24~~ undergoes degradation and releases vancomycin ~~or a vancomycin derivative~~ *in vivo*.

32. (Withdrawn/Currently Amended) A method of treating a bacterial infection ~~vancomycin susceptible disease~~ in a mammal comprising administering to a mammal in need of such treatment, an effective amount of a combination of vancomycin or a pharmaceutically acceptable salt~~, solvate or hydrate~~ thereof, and a compound of claim 1.

33. (Currently Amended) A kit comprising in separate containers in a single package, pharmaceutical compositions for use in combination to treat a bacterial infection ~~vancomycin susceptible disease~~ which comprises in one container a therapeutically effective amount of vancomycin or a pharmaceutically acceptable salt~~, solvate or hydrate~~ thereof in a pharmaceutically acceptable carrier and in a second container a therapeutically effective amount of a compound of claim 1 or a

pharmaceutically acceptable salt~~, solvate or hydrate~~ thereof in a pharmaceutically acceptable carrier.

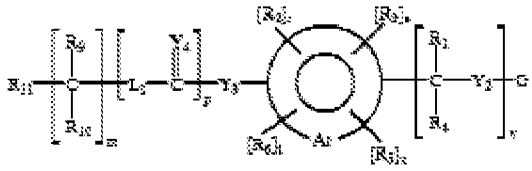
34. (New) The compound of claim 19, wherein the amino acid is selected from the group consisting of alanine, valine, leucine, isoleucine, glycine, serine, threonine, methionine, cysteine, phenylalanine, tyrosine, tryptophan, aspartic acid, glutamic acid, lysine, arginine, histidine and proline.

35. (New) The compound of claim 21, wherein the amino acid is selected from the group consisting of alanine, valine, leucine, isoleucine, glycine, serine, threonine, methionine, cysteine, phenylalanine, tyrosine, tryptophan, aspartic acid, glutamic acid, lysine, arginine, histidine and proline.

36. (New) A method of treating a bacterial infection in a mammal comprising administering an effective amount of a compound of claim 21, to a mammal in need of such treatment, whereby, the compound of claim 21 undergoes degradation and releases vancomycin *in vivo*.

Reason for Allowance

The following is an examiner's statement of reasons for allowance: The instant claimed invention is drawn to dimers and quadramers of Vancomycin tethered by polyethylene glycol. The closest prior art is that of Greewald et al, US 6,180,095 where drugs are tethered to polyethylene glycol compounds as described by the following formula:



The prior art, however, does not teach or suggest or provide motivation to modify the the dimers and quadramers of Vancomycin of US 6,180,095 and arrive at the instant invention as claimed. Therefore, the invention is free of the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS S. HEARD whose telephone number is (571)272-2064. The examiner can normally be reached on 9:00 a.m. to 6:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cecilia Tsang can be reached on (571) 272-0562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Anish Gupta/
Primary Examiner, Art Unit 1654

/Thomas S Heard/
Examiner, Art Unit 1654